

PATENT**REMARKS**

Applicant appreciates the thorough examination of the application that is reflected in the Office Action dated February 23, 2004. To expedite prosecution of this application, Applicant amends claims 1-4, and cancels claims 6-19 without prejudice to filing a divisional application to pursue to the subject matter of those claims. These amendments are not made in response to any rejection in the Office Action, but only to expedite prosecution. Applicant also adds new claims 21-32.

Applicant believes the foregoing amendments comply with requirements of form and thus may be entered under 37 C.F.R. § 1.116(a) as presenting rejected claims in better form for consideration on appeal. Alternatively, to the extent any of these amendments are deemed to touch the merits, then entry is requested under 37 C.F.R. § 1.116(t). These amendments were not earlier presented because they are in response to the matters pointed out for the first time in the Final Office Action.

Claims 1-5 and 21-32 are pending in the application. Reconsideration of the application is respectfully requested.

Art-based Rejections**Claims 1-5**

The Official Action rejects claim 1 under 35 U.S.C. 102(b) as being anticipated by Horner et al. (USPN 5,357,544 A), rejects claim 4 under 35 U.S.C. 103(a) as being unpatentable over Horner et al. further in view of Bottomley. (WO 98/19491), and rejects claim 5 under 35 U.S.C. 103(a) as being unpatentable over Horner et al. further in view of Wiley et al. (USPN 5,854,785 A).

Applicant respectfully traverses these rejections for at least the following reasons.

Claim 1

To assist the Examiner in understanding how claim 1 reads on an embodiment of the invention shown, for example, in FIG. 3, Applicant annotates claim 1 as indicated below. The

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application discusses this embodiment, for example, at page 8:17 through page 9:2 and at page 11:1 through page 12:11 of the specification. Applicant notes that the claims should not be construed as being limited to these embodiments, and that the annotation is provided only for the purpose of showing the Examiner how claim 1 reads on these embodiments. Claim 1 relates to a communication receiver that requires:

- a low pass filter (304) that filters a base band signal (OUTPUT OF 302) to produce on-channel received samples (305) by removing out-of-channel signals from the baseband signal (OUTPUT OF 302); and
- a processor (307) that processes said base band signal (OUTPUT OF 302) to produce out-of-channel received samples (306).

Applicant respectfully submits that the cited references fail to teach or suggest, for example, "a processor that processes said base band signal to produce out-of-channel received samples," as recited in claim 1. For exemplary benefits associated with this feature, see, for example, 5:1-14, 8:23-9:2, and 14:1-7 of the present application. Applicant notes that the claims should not be construed as being limited by this embodiment or by the particular benefits described.

The Horner Reference

The receiver 10 in Horner includes an IF downconverter 16 that down converts the frequency of the selected band from RF range to an IF band, and then extracts an encoded signal by stripping away the carrier. See Horner 3: 44-59. A digitized composite signal is input to DSP 20 for decoding the composite FM signal and extracting the left and right channel information. See Horner 3:68 through 4:2. As shown in FIG. 2 of the Horner et al. reference, the 152 KHz output of the A/D converter 18 is passed to the mixing function 26. *The output of the mixing function 26 is the base band signal.* In Horner, the output of the mixing function 26 is passed through a low-pass anti-aliasing filter 30 and then to an 8 to 1 decimator function 32 that reduces the processing rate from 152 KHz to 19 KHz thereby providing an error signal at the rate of once per pilot period.

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In para. 1 of the Final Office Action, the Examiner argues that "One processing block receives the base band signal and output a pilot signal, an out-of channel signal. Both the pilot and base band signal then pass to another block, decoder in order to output the on channel signals (see figure 1 and 2)."

The Office essentially argues that the output of the phase locking and tracking function 22 is a "base band signal."

Applicant disagrees and points the Examiner to col. 5, lines 4-8 of Horner which discusses that "loop filter 34 ...passes only the pilot signal portior which has been modulated down to D.C. ... The output of loop filter represents the phase error between the pilot signal and the reference signal." Thus, the output of Horner's loop filter 34 is not "a base band signal."

Significantly, the output of the mixing function 26 is not passed to a processor, much less "a processor that processes said base band signal to produce out-of-channel received samples," as recited in claim 1.

For at least the foregoing reasons, Applicant respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 1. Accordingly, Applicant respectfully submits that claim 1 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 2-5 are separately patentable at least by virtue of their dependency from independent claim 1, and also because those claims recite additional features that are not taught or suggested by the cited references.

Applicant submits that new claims 21-32 are also patentable for at least the same reasons.

Claims 6-19

The Official Action rejects claims 6-20 under 35 U.S.C. 103(a) as being unpatentable over Horner et al. further in view of Soliman et al. (USPN 6,321,090 B1).

Applicant cancels claims 6-19 without prejudice to filing an application to pursue to the subject matter of those claims. Accordingly, the rejection of claims 6-19 is moot.

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REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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